vertebra there may be a ventral median process, arising of course from the centrum, termed the hypapophysis.

From the sides of the neural arch, or from the centrum itself, there is commonly a longer or shorter process on each side, known as the transverse process. This is sometimes formed of two distinct processes, one above the other; in such cases the upper part is called a diapophysis, the lower a parapophysis.

The neural arch may also bear other lateral processes, of which one directed forwards is the nietapophysis, the other directed backwards the anapophysis.

The series of bones which constitute the vertebral column can be divided into regions. It is possible to recognise cervical, dorsal, lumbar, sacral, and caudal vertebrae. In the case of animals with only rudimentary hind-limbs, such as the Whales, there is no recognisable sacral region. The neck or cervical vertebrae are nearly always seven in number. The well-known exceptions are the Manatee, where there are six, and certain Sloths, where there are six, eight, or nine. These rare exceptions only accentuate the very remarkable constancy in number, which is very distinctive of the mammals as compared with lower Vertebrata. There are of course abnormalities, the last cervical, and sometimes the last two, assuming the characters of the ensuing dorsals, by developing a more or less complete rib. There are also recorded examples of *Bradypus,* in which the number of cervicals is increased to ten. The characteristics, then, of the cervical vertebrae are, in the first place, that they do not normally bear free ribs, and that there is a break as a rule between the last cervical and the first dorsal on this account. In birds, for example, the cervicals, differing in number in different families and genera, gradually approach the dorsals by the gradually lengthening ribs. The transverse processes of the vertebrae are commonly perforated by a canal for the vertebral artery, and are bifid at their extremities. In some Ungulates these vertebrae, moreover, approximate to the vertebrae of lower "Vertebrata in the fact that there are ball and socket joints

between the centra, instead of only the fibrous discs of the remaining vertebrae.

The first two vertebrae of the series are always very different from those which follow. The first is termed the